

CHALLENGES FACED BY DENTISTS WORKING IN RURAL HEALTH CENTERS IN PUNJAB: COVID-19 PERSPECTIVE

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ABSTRACT: This study aimed to explore the challenges faced by dentists working in rural health centers in Punjab, Pakistan. Data from 90 general dentists was collected from 45 RHCs in Punjab using cluster sampling. The data was collected via telephonic communication by extracting contact numbers from the official website of primary and secondary health care system. The results revealed that 64.6% of general dentists working in RHCs in Punjab are performing dental emergencies while knowing the risk of being Corona positive which was contrary for performing elective dental procedures. The majority of dentists reported unnecessary emphases from the patient's side (72.2%) for executing dental emergencies which was contrary in performing elective dental procedures. Patients' rigid behavior was also reported by 88% of the dentists on treatment refusal due to covid-19 contagion while 12% of patients believed that covid-19 does not exist while considering it a political propaganda for funding from WHO.

Keywords: Dental Emergencies, Peripheries, COVID-19, Dentists

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INTRODUCTION

COVID-19 pandemic is acting as a modifier of customs while uncovering the various gaps in the different fields of life including health systems around the globe. Dentists play an integral role as health care service providers for the oral cavity diseases which may affect the somatic as well as psychological well-being of the patients (Izzetti, Nisi, Gabriele and Graziani, 2020). The current paper has tried to explore the challenges encountered by the dentists during COVID-19.

During the COVID-19 pandemic, dentists as health professionals are at greater risk of being COVID positive as they treat people while working in their oral cavity which has a close connection with the nasopharyngeal area. This close contact is less than 2-meter distance that was suggested by WHO to avoid infection (Bourouiba, 2020; Bayani, Pourali and Keivan, 2017; Lauer *et al.*, 2020). It has also been explored that the pathogens causing covid-19 remain in the air for a long period which increases the transmission of infection before falling off on any surface especially in the dental setup (Peng *et al.*, 2020).

According to the statistics given on the official website of COVID-19, the number of positive Corona patients has crossed 1.5 lac with an increase in the deaths (more than 100 deaths per day) (Izzetti, Nisi, Gabriele and Graziani, 2020). This increasing rate was reflecting a new alarming situation in terms of the exponential growth of more infections as observed in Italy. The situation was

worse all over Pakistan whereas Punjab (total cases till now 58239) and Sindh (total cases till now 57868) were with a higher number of positive cases which are increasing at an alarming rate. Literacy level, primarily health literacy, plays a very vital role in pandemic conditions in all eras (Osman, Ladhani, Findlater, and McKay, 2017). The literacy rate of Pakistan is 51.8% females and 72.5% males which are considered as literate, on the basis of being able to read and write their names ("All provinces outshine Sindh in literacy rate", 2020). According to a survey conducted in 2019 by The Economic Survey of Pakistan, the literacy rate of Khyber Pakhtunkhwa is 55.3%, Punjab is 64.7%, Baluchistan is 55.5% and Sindh is 62.2%. By having the limited ability to read and write does not fulfill the criteria of understanding factual knowledge. As per a great leader, Nelson Mandela, "No country can really develop unless its citizens are educated. Education is the most powerful weapon which you can use to change the world. Education is the great engine of personal development" ("Oprah Talks to Nelson Mandela", 2020). The current global health threat signified the importance of educating the masses and enhancing health literacy, in particular, to effectively deal with stressful situations as currently encountered.

A research study conducted in Pakistan summarized that oral health literacy is at a marginal level among adult patients approaching the private dental hospital. The authors highlighted the need to explore oral health literacy at various levels including the public

health systems and education system of Pakistan (Ahmed, Shah, Khayyam, Sheikh and Anwer, 2018). In this global health emergency, many dentists working in the peripheries of Pakistan, where people with low income and the least level of education who are unable to understand the alarming situation of covid-19 are visiting dental sections of Government hospitals for seeking treatment. Numerous dental health practitioners are proactively restricting their dental practices to dental emergency procedures as Pakistan's dental Authorities have not introduced any guidelines to conduct safe dental practice. So, a need was strongly felt to explore the challenges (in terms of patients' attitude towards procedure) faced by the dentists working in health care centers located in peripheries of Punjab, Pakistan.

METHODOLOGY

Research design: This quantitative study was descriptive in nature.

Sampling technique: Data was collected using cluster sampling as Punjab has 9 districts namely, Bahawalpur, Faisalabad, Gujranwala, Lahore, Multan, Sahiwal, Sargodha, Rawalpindi, and Dera Ghazi Khan. The total number of rural health centers in all 9 districts is 318 RHC. District wise total number of RHCs are Bahawalpur (41 RHC), Faisalabad (38 RHC), Gujranwala (49 RHC), Lahore (28), Multan (34 RHC), Sahiwal (26 RHC), Sargodha (21 RHC), Rawalpindi (30 RHC), and Dera Ghazi Khan (35 RHC). Using the lottery method, from each district, five rural health centers (45 as a whole) were approached for data collection.

Sample size: The sample size was comprised of 90 general dentists working in rural health centers of districts of Punjab.

Procedure: The general dentists working in rural health centers of districts of Punjab were approached telephonically. The willingness to participate in the study was taken from them along with verbal consent while explaining the research purpose. Afterward, they were asked five questions about the dental practices in rural health centers and their verbal answers were recorded on the survey sheet.

Data analysis: Data was analyzed using SPSS version 25. Descriptive statistics were used to analyze data in percentages to assess the prevalence of practicing dentists in rural health centers in Punjab, Pakistan during the covid-19 pandemic due to the attitude of patients.

RESULTS

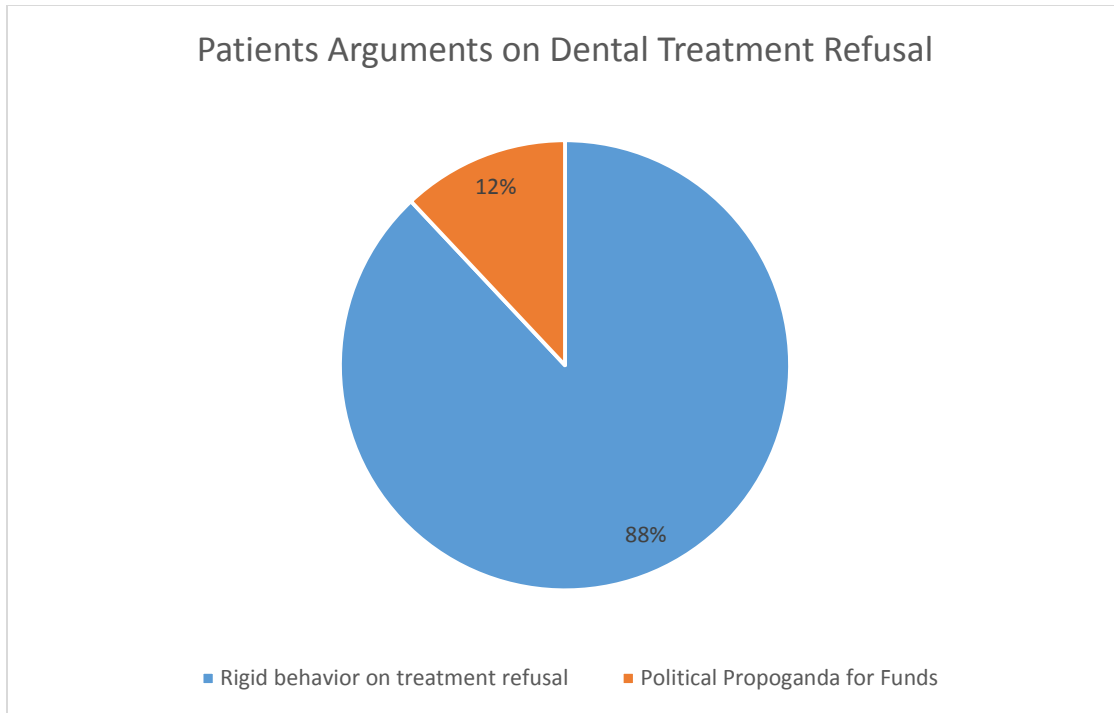
The findings of descriptive statistics demonstrated that 64.6% of general dentists who are working in RHCs in Punjab are performing dental emergencies while knowing the risk of being Corona positive, however, 35.6% of dentists reported that they are not even executing dental emergencies. When they were inquired about performing elective dental procedures, the majority have replied in No (53.3%) whereas 46.7% of dentists stated that they are performing elective dental procedures as well. For performing dental emergencies, the majority of dentists reported unnecessary emphases from the patient's side (72.2%) whereas 27.8% of dentists replied as not having any emphases from the patients' side. The majority of dentists reported no unnecessary emphases from the patients' side (58.9%) for performing elective dental procedures, whereas 41.1% of dentists replied in positive when inquired about unnecessary emphases from the patients' side.

Table 1: Dental Procedure Performance Incidence during COVID-19.

Questions	YES (%age)	NO (%age)
1. Performing dental emergency procedures during the COVID-19 pandemic situation while knowing the risk	64.6	35.6
2. Performing dental elective procedures during the COVID-19 pandemic situation	46.7	53.3
3. Dentists forced by the patients for performing dental emergency procedures during the COVID-19 pandemic situation	72.2	27.8
4. Dentists forced by the patients for performing dental elective procedures during the COVID-19 pandemic situation	41.1	58.9

Furthermore, when probed about the reason for performing dental procedures during COVID-19, about 88% of dentists replied, majority of patients are uneducated and exhibit rigid behavior in terms of retaliating from even listening to COVID-19 pandemic

related information and forcing for treatment, whereas 12% of the dentists stated that patients perceive COVID-19 as a political propaganda to get aid from the world bank.



Graph 1: Patients Arguments on Dental Treatment Refusal

DISCUSSION

The study was aimed to explore the challenges (in terms of patients' attitude towards procedure) faced by the dentists working in health care centers located in peripheries of Punjab, Pakistan. The current study reported that the majority of the general dentists who are working in RHCs in Punjab are performing dental emergencies while knowing the risk of being Corona positive due to the behavior of patients. When dentists were asked in context of performing elective dental procedures, the majority replied in negative as compared to the dentists who reported that they are performing elective dental procedures as well. This demonstrates that although COVID-19 has influenced the frequency of dental procedures being done still the frequency is quite high which could be a possible source of COVID-19 spread in peripheries of Pakistan. For performing dental emergency procedures, the majority of dentists reported unnecessary emphases from the patient's side (72.2%) even without having any PCR test. Ahmed, Shah, Khayyam, Sheikh and Anwer, (2018) reported low oral health literacy among adult patients visiting private dental hospitals. A similar finding was observed in the current study which in turn makes dental professionals working in peripheries more susceptible to the COVID-19. About 41.1% of dentists replied in positive on asking about unnecessary emphases from patients' side without PCR test. Furthermore, on exploring the reason for performing dental procedures during COVID-19, the

majority of dentists replied that the mainstream of patients are uneducated and show rigid behavior in terms of retaliating from even listening to COVID-19 pandemic related information and forcing for treatment whereas the rest of the dentists answered that patients taking COVID-19 as political propaganda to get aid from the world bank. According to Osman, Ladhani, Findlater, and McKay (2017), literacy level, primarily health literacy, plays a very vital role in pandemic conditions in all eras which is at the bottom line among people living in peripheries in Pakistan.

Conclusion: The results of the current study concluded bottom-line oral health literacy due to which dentists are prone to COVID-19 at an extreme level.

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